

REMARKS

In the present Amendment, claim 1 has been amended to recite that each of the at least two kinds of inks includes triethyleneglycol. The claim has also been amended to recite that in inks having the same hue, the content of a specific water-soluble organic solvent in the ink having a low concentration of dye is less than the content of the specific water-soluble organic solvent in the ink having a high concentration of dye. Section 112 support for the amendments may be found, for example, in the working Examples of the specification, the first full paragraph on page 9 of the specification, and the paragraph bridging pages 9-10 of the specification.

New claims 7-9 have been added. Section 112 support for claim 7 may be found, for example, at page 9, lines 20-21 of the specification. Section 112 support for claim 8 may be found, for example, at pages 12-16 of the specification. Section 112 support for claim 9 may be found, for example, at pages 16-17, 22-25, 108-110 and 131-133 of the specification. No new matter has been added, and entry of the Amendment is respectfully requested.

Upon entry of the Amendment, claims 1-9 will be pending.

In Paragraph No. 4 of the Action, claims 1-6 are rejected for obviousness-type double patenting as allegedly being unpatentable over claims 1, 3, 4, 6, 8, 9, 12 and 13 of U.S. Patent 6,939,399 (Yabuki).

Applicants submit that this rejection should be withdrawn because the ink set of the present invention is not merely an obvious variant of the ink set claimed in Yabuki '399.

The claims of Yabuki '399 do not disclose or suggest that the inks employed must include triethylene glycol. Nor do they disclose or suggest that for inks of the same or common

hue, the content of a specific water-soluble organic solvent in the ink having a low concentration of dye (often referred to as the "light" ink) is reduced in comparison to the content of that water-soluble organic solvent in the ink having a high concentration of dye.

For at least these reasons, reconsideration and withdrawal of the obviousness-type double patenting rejection of claims 1-6 based on claims 1, 3, 4, 6, 8, 9, 12 and 13 of Yabuki '399 are respectfully requested.

In Paragraph No. 5 of the Action, claims 1-6 are rejected for obviousness-type double patenting as allegedly being unpatentable over claims 1-5 and 8-12 of U.S. Patent 6,874,882.

Applicants submit that this rejection should be reconsidered and withdrawn for the same reasons that the preceding rejection should be reconsidered and withdrawn.

In Paragraph No. 6 of the Action, claims 1-6 are provisionally rejected for obviousness-type double patenting as allegedly being unpatentable over claims 1, 3-5 and 7-10 of copending Appln. No. 10/508,792 (U.S. 2005/0174409).

Applicants submit that this rejection should be reconsidered and withdrawn for the same reasons that the preceding two rejections should be reconsidered and withdrawn.

In addition, the claims of the '792 application call for an ink set comprising plural inks, each one of the plural inks having "a different absorbance." This would appear to indicate that each ink is of a different hue. There does not appear to be in the claims of the '792 application, any disclosure or suggestion of the use of at least two kinds of inks having a common hue and different densities.

Reconsideration and withdrawal of the rejection are respectfully requested.

In Paragraph No. 8 of the Action, claims 1-6 are rejected under 35 U.S.C. §102(a) as allegedly being anticipated by WO 2003/082994 (the Examiner notes that the U.S. equivalent is U.S. 2005/0174409).

In Paragraph No. 9 of the Action, claims 1-6 are rejected under 35 U.S.C. § 102(a) as allegedly being anticipated by EP 1384762.

In Paragraph No. 10 of the Action, claims 1-6 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Taguchi et al (U.S. 6,874,882).

In Paragraph No. 11 of the Action, claims 1-6 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Yabuki (U.S. 6,939,399).

Applicants submit that these rejections should be withdrawn because the cited documents do not disclose or render obvious the ink set of the present invention.

In the case of an ink set containing at least two inks having the same hue but having different concentrations, the present inventors have discovered that superior results can be obtained by specifying or setting (i) specific water-soluble organic solvent contents and (ii) discoloration velocity constants in the inks so as to satisfy specific relations, respectively. The cited documents do not disclose or suggest an ink set in which, in inks having the same hue, the content of a specific water-soluble organic solvent in the ink having a low concentration of a dye (light ink) is reduced in comparison to the content of that solvent in the ink having a high concentration of dye (dark ink). Thus, the references do not disclose (anticipate) or suggest (render obvious) the ink set of the invention.

Even if a prima facie case of obviousness could be established based on one or more of the cited documents, the ink set of the invention provides unexpectedly superior results which rebut any prima facie case of obviousness and confirm the patentability of the present invention. These superior results are shown in Table 23 at page 215 of the specification. As shown there, the ink set of the invention provides images which maintain an excellent color balance even after forced discoloration tests in an ozone atmosphere, whereas comparative ink sets did not. The Examiner will also kindly note Table 20 at page 209 showing that Light Magenta Ink LM-01 employed in the ink set of the invention contained only 90 grams of triethylene glycol monobutyl ether, whereas the light magenta inks LM-02 and LM-03 used in the comparative ink sets used 120 grams, the same amount used in the (dark) Magenta Ink. The Examiner will also kindly note the same point relative to the Light Cyan Ink LC-01 used in the ink set of the invention relative to the light cyan inks LC-02 and LC-03 used in the comparative ink sets, as seen in the continuation of Table 20 on page 210. That is, only 70 grams of triethylene glycol monobutyl ether were used in Light Cyan Ink LC-01, whereas 100 grams were used in all of the other (light and dark) cyan inks. Accordingly, the ink set of the invention is patentable over the cited documents.

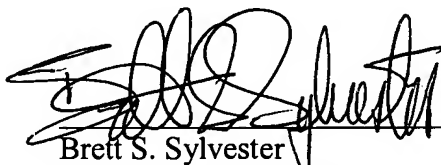
In view of the above, reconsideration and withdrawal of the § 102(a) rejections based on WO '994 and EP '762, and the § 102(e) rejections based on US '882 and Yabuki '399, are respectfully requested.

Amendment Under 37 C.F.R. § 1.111
U.S. Appln. No.: 10/809,955

Allowance is respectfully requested. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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